# IOWA STATEWIDE COMPOST MARKET ASSESSMENT

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## Prepared for:

# **Iowa Department of Natural Resources**

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#### **EXECUTIVE SUMMARY**

The 1998 Iowa Statewide Compost Market Assessment is a comprehensive study of current and potential compost usage and production throughout the state. The finished report and marketing plan provides tools to the Iowa composting industry to use in industry and market expansion.

With assistance from 11 Iowa green industry trade associations, 4,640 surveys were mailed, and a total of 457 total surveys were completed and returned. The compost use markets evaluated included organic/sustainable farmers, landscapers/lawn care professionals, nurseries, silviculture (forestry and Christmas tree growers), sod/turfgrass producers, topsoil dealers, golf course/sports turf managers, garden centers/retail outlets, gardeners, and government entities (parks, schools/colleges/universities, and the Iowa Department of Transportation).

The project also included a follow-up survey of compost facilities conducted in 1996 by the Iowa Department of Natural Resources. The original 1996 survey was expanded to include additional information on issues related to marketing compost. Sixty-four compost facilities were surveyed.

#### **PURPOSE**

Compost market research was warranted due to the rapid growth of the composting industry in Iowa and its promise as a waste management method within the state. A 1996 compost facility survey revealed that less than 40 percent of the compost produced throughout Iowa is sold.

For composting to flourish in Iowa, markets for compost must be identified, end user requirements must be better understood, and market growth and product value must be encouraged and increased. Therefore, the specific goals of the project were to:

- Create baseline marketing data for state entities, compost producers, and potential new project developers.
- Quantify current compost usage and value and estimate future usage.
- Identify requirements for compost use by various market segments.
- Reduce compost marketing barriers related to lack of market knowledge and identify educational requirements.

- Provide educational materials on compost use to improve market expansion and address user concerns.
- Develop a Statewide Compost Market Development Plan to promote market expansion, encourage compost marketing by individual composting facilities, and increase product value.

## **COMPOST MARKETS**

A primary purpose for completing the Iowa Statewide Compost Market Assessment was to determine the size of the current compost market, its potential for growth in the near term, and methods to encourage its growth. The following table shows the potential growth in compost and soil amendment markets over the next two years, and the total achievable markets that could potentially be developed.

Total Current Market/1998 and Year 2000 Market (cubic yards)

Market Segment	Compost		Soil Amendments	
	Current	2 Yr. Growth*	Current	2 Yr. Growth*
Government Entities	83,610	191,086	17,322	20,823
Garden Centers/Retail Outlets	68,624	186,558	145,615	194,395
Organic/Sustainable Farmers	58,708	92,302	184,116	216,889
Landscapers/Lawn Care	24,895	40,384	19,786	24,287
Golf/Sports Turf Managers	4,130	6,516	3,310	3,996
Nurseries	2,497	4,028	168,326	183,674
Total	242,461	520,874	538,475	644,064

<sup>\*</sup> Includes growth in product usage by current end users and usage by new end users.

Through industry growth an ultimate market of over 625,000 cubic yards of compost per year is achievable by the year 2000.

#### COMPOST FACILITIES

Since a 1996 compost facility survey, facilities reported a 20 percent increase (92,632 tons) in capacity and a 21 percent (70,204 tons) increase in total material composted. The largest tonnage increase occurred with the following materials:

- Sewage sludge (21,200 tons);
- Industrial sludge (18,000 tons);
- Animal manure/bedding (13,489); and
- Yard wastes (11,507).

# **Composting Facility Summary Data\***

	1998	1996
Facility Respondents:	64	62
Total Annual Composting Capacity (tons)	460,730	368,098
Total Material Composted Annually (tons)	323,334	253,130
Total Unused Annual Capacity (tons)	137,396	114,968
Total Finished Compost Distributed (tons)	106,649	108,353

<sup>\*</sup>Does not include composting facilities not required to obtain state operating permits.

Several factors may have contributed to the reported increases:

- Increased awareness of funding opportunities (Compost Initiative Grant) which allowed facility expansion.
- Facility operator education and training programs.
- The state's 50% landfill reduction goals.
- Composting of other organics (i.e., animal wastes, sludges, and paper products) besides wood and yard wastes.

At the same time, facilities reported a 2% decrease (1,704 tons) in the amount of compost distributed. This may be due, in part, to the lack of marketing knowledge of inhouse staff personnel.

Better emphasis must be placed on market development at individual composting facilities. This will improve the availability of quality compost and allow for greater local availability of quality product throughout the state.

#### BARRIERS TO COMPOST MARKET DEVELOPMENT

Barriers often exist because of a lack of knowledge, especially in areas where compost has not been marketed in large quantities. Therefore, most barriers can be addressed and overcome with the proper effort. The following table presents market development barriers identified by compost users and producers.

# **Barriers to Market Development**

<u>Facility Data</u> Perceived Compost Marketing Barriers	Market Data Factors to Encourage Compost Use
23% Transportation Costs	42% Improved Local Availability
20% Quality of Product	39% Lower Cost
20% Markets Undeveloped	30% Availability of Consistent Products
17% Lack of Marketing Experience/Staff	29% Availability of Higher Quality Product
14% Volume of Marketable Product	27% List of Local Compost Sources

Although the IDNR can assist the industry in market development, primary marketing efforts must be completed by the facilities themselves, and investment of time and resources must be made to improve market development efforts at individual facilities.

## **COMPOST MARKET EXPANSION**

This section describes market expansion techniques and market planning information that should be developed into a formal Statewide Compost Marketing Plan. Addressing the following issues will be key to market expansion, improving product value, and industry sustainability. The Project Team developed specific "Action Items" for each of the following development areas:

- Product Quality;
- Market Development Emphasis;
- Local Availability; and
- Educational Efforts.

Action Items were also developed for each of the ten specific market segments identified throughout the project. Although each of the ten market segments investigated possess specific requirements in order to improve market expansion, the overall requirements of the industry statewide are similar.

## CONCLUSION/RECOMMENDATIONS

It is key for compost producers to understand the market value of quality compost so they will invest in improving product quality on a facility by facility basis. Although each of the ten market segments investigated possess specific requirements in order to improve market expansion, the overall requirements of the industry are improved availability of quality compost, consumer education, and greater market development emphasis at individual composting facilities.

It is evident from survey data that both composting facility managers and end users agree about many of the factors necessary for expanded compost usage. Although the responsibility for market development often falls on individual composting facilities, overall efforts can greatly be improved by focusing on a coordinated basis, perhaps through a task force or trade association. The IDNR has assisted in these efforts thus far, and their continued and expanded efforts are suggested.

In order for composting to become a sustainable industry throughout Iowa, the mindset of compost producers must be changed from a landfill diversion mentality to a product manufacturing mentality.